AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1. (Cancelled)

2. (Currently Amended)[[:]] A method of modulating a digital signal of width L in frequency on a given useful frequency band comprising:

separating the digital signal into N blocks b_n ($1 \leq n \leq N$),

splitting the given useful frequency band into N contiguous parts P_n,

defining channels C_n, of width l_n in frequency, lying within an associated part P_n, the channels C_n being separated, and

distributing each block of digital signals b_n over the associated channel C_n~~The method of modulation as claimed in the claim 1~~,

wherein the channels C_n are defined by taking account of a predetermined minimum distance between the channels to allow a predetermined maximum number of blocks to be affected by the phenomenon of flat fading,

wherein the predetermined minimum distance between the channels is determined as a function of the number N of channels, of their width l_n, and of a mean width of the frequency band affected by the phenomenon of flat fading.

3. (Cancelled)

4. (Currently Amended)[[:]]: The method of modulation as claimed in the claim 2 [[3]], wherein the minimum distance is determined such that a minority of channels C_n are affected by the phenomenon of flat fading.

5. (Currently Amended)[[:]] The method of modulation as claimed in the claim 2 [[1]], wherein the channels C_n are of identical widths equal to an Nth of the width of the digital signal L: $l_n = L/N$, $\forall\ 1 \leq n \leq N$.

6. (Currently Amended)[[:]] The method of digital modulation as claimed in the claim 2 [[1]] wherein :

the digital signal is separated into N = 2 blocks b_n,

the given useful frequency band is split into N = 2 parts P_n,

the first block b_1 is distributed over a channel C_1 of width L/2 lying within the first part P_1 of the given useful frequency band and the second block b_1 is distributed over a channel C_2 of width L/2 lying within the second part P_2 of the given useful frequency band.

7. (Currently Amended)[[:]] The method of modulation as claimed in the claim 2 [[1]], wherein the given useful frequency band is the FM band.

8. (Currently Amended)[[:]] A modulator of digital signals over a given useful frequency band implementing the method of modulation as claimed in claim 2 [[1]], comprising:

means of separation of the digital signal into N blocks b_n ($1 \leq n \leq N$),

means of splitting of the given useful frequency band into N contiguous parts P_n,

means of definition of channels C_n of width l_n in frequency, lying within the associated part P_n,

means of distributing of each block of digital signals b_n over the associated channel C_n.

9. (Currently Amended)[[:]] A demodulator of digital signals conveyed on a given useful frequency band by a transmitter comprising a modulator as claimed in claim 8, comprising:

means of scanning of the N channels C_n enabling reading of the N blocks b_n of signals distributed over these channels,

means of recombination of the N blocks read $\hat{b}_n$ in the N channels C_n into a digital signal $\hat{s}[m]$.

10. (Currently Amended)[[:]] A transmitter of digital signals on a given useful frequency band comprising at least one transmission chain comprising a modulator as claimed in claim 8, wherein the transmission chain comprises an error corrector coder conveying the coded digital signal $c^q[m]$ to the modulator.

11. (Currently Amended)[[:]] The transmitter as claimed in the claim 10, wherein the transmission chain comprises an interleaver placed between the error corrector coder and the modulator.

12. (Currently Amended)[[:]] The transmitter as claimed in the claim 10, wherein a distinct set of channels $\{C^q_n\}$ is associated with each of the Q transmission chains.

13. (Currently Amended)[[:]] A receiver of digital signals conveyed on a given useful frequency band by a transmitter comprising a demodulator wherein: a decoder associated with a [[the]] error corrector coder of the transmitter receiving the digital signal recombined $\hat{s}[m]$ by the demodulator,

wherein the given useful frequency band is the FM band.

14. (Currently Amended)[[:]] A receiver of digital signals conveyed on a given useful frequency band by a transmitter comprising:

a demodulator, wherein

a deinterleaver associated with a [[the]] interleaver of the transmitter receiving the digital signal recombined $\hat{s}[m]$ by the demodulator,

a decoder associated with a [[the]] error corrector coder of the transmitter receiving the digital signal recombined deinterleaved $\hat{c}[m]$ by the deinterleaver,

wherein the given useful frequency band is the FM band.

15. (Currently Amended)[[:]] Use of the transmitter as claimed in claim 10 or conveying digital signals in the FM band.

16. (Cancelled)

17. (Currently Amended)[[:]] A receiver of digital signals conveyed on a given useful frequency band by a transmitter as claimed in claim 10 comprising a demodulator wherein: a decoder associated with the error corrector coder of the transmitter receiving the digital signal recombined $\hat{s}[m]$ by the demodulator.

18. (Currently Amended)[[:]] A receiver of digital signals conveyed on a given useful frequency band by a transmitter comprising a demodulator as claimed in claim 9 wherein:

a decoder associated with the error corrector coder of the transmitter receiving the digital signal recombined $\hat{s}[m]$ by the demodulator.